MIT's Oldest and Largest Newspaper

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Thursday, February 08, 2018

WEATHER, p. 2
THU: 30°F | 17°F Sunny
FRI: 34°F | 28°F Partly Cloudy
SAT: 45°F | 37°F Chance Showers

Students participate in IAP competitions on robotics, programming, web design

MASLAB, Battlecode, Web Programming classes attract hundreds of students to build tech projects

By Zoe Anderson
ASSOCIATE NEWS EDITOR

This IAP, several programming competitions provided interested students the opportunity to learn new skills, practice old ones, and collaborate with — or compete against — their peers. Three such competitions are summarized below.

MASLAB

In 6.146 (Mobile Autonomous Systems LABoratory: MASLAB), eight teams designed and built autonomous robots from scratch in three weeks. The robots competed to move balls of three different colors into corresponding goals with no human interaction. The class encouraged students to commit six to ten hours per day to working on their robot.

The intense design and build process required a combination of mechanical engineering, electrical engineering, and computer science skills. Andrew Reilly, director of MASLAB 2018, told *The Tech* in an email that most teams opted for a similar physical structure but diverged more different in their software.

Team "No Motorcycles Allowed" (Shreyas Kapur '20, Jeevesh Konuru '20, Noah Moroze '20, Thanh Nha Nguyen '19, and Aashish Welling '20) won the competition. The team implemented time outs for when their bot was stuck, helping it to react effectively in these disadvantageous situations.

"In order to score well, robots need to be able to detect and respond intelligently to a wide range of scenarios. Unlike in many pure software projects, thresholds between these scenarios aren't always clean and it can be more difficult to detect when a physical process has failed compared to a software process," Andrew Reilly, director of MASLAB, wrote in an email to *The Tech*.

The competition was "a bit more challenging than expected," Reilly wrote, and so the MASLAB staff will probably simplify it next year to ensure time for testing at the end.

"Autonomous systems are exciting because of how widespread they are," Reilly wrote. "Anything that needs to operate without human intervention is an autonomous system, including robots, automatic trading software, and even vehicles such as modern airliners and self-driving cars."

Working on a team is another important component of MASLAB. "The class tests participants' teamwork skills because it requires team members with differing skill sets to work together tightly for a month," Reilly wrote.

Battlecode

Over 1000 teams and 3000 individuals registered for this year's Battlecode — a battle strategy and artificial intelligence competition — making it the largest yet. In this year's game, teams faced off against each other while escaping from

IAP, Page 3

SANDHYA KALAVACHERLA—THE TECH

A display in honor of Black History Month appeared in Lobby 7 this week.

EMMA BINGHAM—THE TECH

Star Market's aisles were cleared out by Feb. 3 in preparation for the store's closing. Caution tape prevented customers from walking into the aisles, while the last remaining items were deeply discounted and stacked on displays at the front of the store.

New SPXCE Intercultural Center hosts grand opening event Mon.

Center to serve as a larger, more central location for LBGTQ@MIT and the Office of Multicultural Programs

By Sandhya Kalavacherla
NEWS EDITOR

The Social Justice Programming and Cross-Cultural Engagement (SPXCE, pronounced 'space') Intercultural Center opened Monday in W31-110. Chancellor Cynthia Barnhart and Suzy Nelson, Vice President and Dean for Student Life, kicked off the grand opening event with a ribbon cutting, which was followed by a celebration with students, staff, faculty.

SPXCE is a collaborative initiative between LBGTQ@MIT and the MIT's Office of Multicultural Programs. It serves as the new home for these two organizations, which were "previously limited in their ability to grow programs for important student communities because of space constraints," Nelson explained in an email to *The Tech*.

"When we heard that space might become available in W31, it was clear that we could enhance our support of these offices and the students they serve with simple improvements, like fresh paint, new flooring, and better furniture," Nelson wrote. Students and staff worked together to make design choices.

"SPXCE works to foster a more inclusive, equitable, and affirming MIT campus climate. It offers a place for students to join a supportive community while discovering and exploring all parts of their identities," Julio Oyola, Assistant

SPXCE, Page 3

IN SHORT

A blood drive will be held in La Sala de Puerto Rico on the second floor of the student center next Monday, Wednesday, Thursday, and Friday from 1 p.m.–6 p.m. and next Tuesday from 8 a.m.–1 p.m. Visit the following website for more details and to make an appointment: http://web.mit.edu/blood-drive/www/.

Meal plan changes and cancellations must be made by Feb. 12 via myhousing.mit.edu.

Register for spring semester classes by tomorrow to avoid the $50 late fee.

Apply for UROP direct funding by Feb. 15.

The Tech is looking for news and sports writers. Please write to join@tech.mit.edu to get started.

Send news and tips to *news@tech.mit.edu*.

Sophomore combines Firehose and Courseroad in new iOS application, FireRoad

By Christina Warren

FireRoad, a new iOS app created by Venkatesh Sivaraman '20, combines Firehose and Courseroad, two websites that help students select courses and organize their schedules.

Sivamaran started developing FireRoad in April 2017, and the app was beta tested over IAP 2018, Sivamaran said in an interview with *The Tech*. It is currently available on the Apple App Store, and has been downloaded over 400 times as of Feb. 6.

The app includes features such as an option to save courses that a user hasn't decided on yet as "favorites," descriptions of course requirements for majors and minors, and the ability to create and save multiple schedules and course roads. Beyond the evident functions, FireRoad can also track a user's progress through various majors and suggest classes that users might not have otherwise known about.

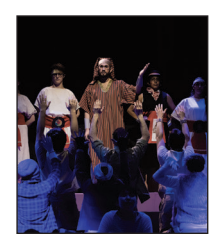
Sivaraman hopes students will use FireRoad as "their primary way to plan their time at MIT." He plans to continue to develop the app to include potential features such as the ability to view course paths that previous users in the same major have taken, as well as an Android version of the app.

"It's my gift to the MIT community," Sivaraman said. "I hope that it helps people."

SHE KNOWS THE ANSWERS
When you've got 99 problems and a pset ain't one. **CAMPUS LIFE, p. 5**

LYING TO OURSELVES
We all do it, especially in the first week of classes. **CAMPUS LIFE, p. 5**

MIT, WE NEED TO TALK
You need to examine your issues. **OPINION, p. 4**



JOSEPH IN PAJAMAS
A Bible story delivered with cookies, milk, and feathered boas. **ARTS, p. 14**

ESSAYS THAT WORKED
How Legolas helped me get into MIT. **CAMPUS LIFE, p. 6**

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WEATHER

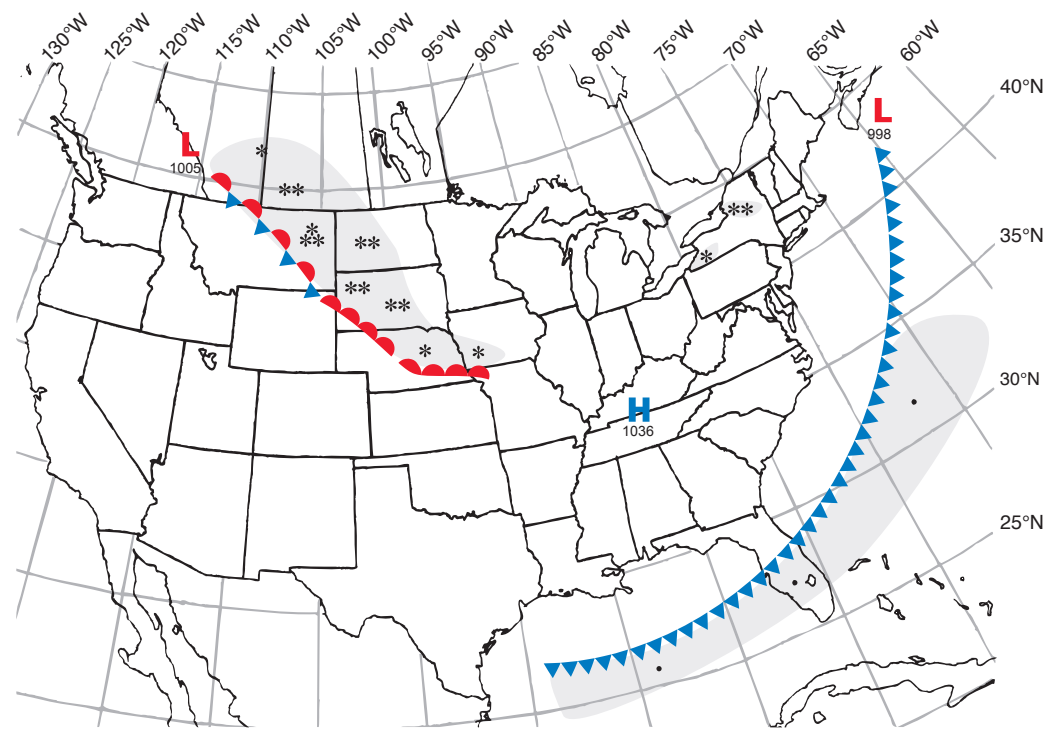
Active weather pattern continues

By Jordan Benjamin
STAFF METEOROLOGIST

After yesterday's storm, which brought snow and rain to New England, clearer and calmer conditions will temporarily set up shop over the region today and into tomorrow. The favorable weather won't last, however; the weekend will feature highs in the 40s °F and several rain chances as a train of low pressure systems progresses out of the Ohio Valley. This progressive pattern will preclude any extreme cold or significant snow in the immediate future, continuing the trend that saw January rally from one of its coldest starts ever to near average by the end of the month. Elsewhere across the nation, a sequence of high pressure systems will dominate the weather across much of the central US, leaving the East Coast and Ohio Valley at the center of most of the action. Mid-February is at the heart of snow season for Boston, which on average receives about 11 inches (30 cm) of snow during the month. It's quite likely that colder air and snow will return before the month is over.

Extended Forecast

Today: Sunny. High near 30°F (-1°C). NW winds at 10-15 mph.
Tonight: Mostly clear. Low around 17°F (-8°C). Winds W at around 10 mph.
Tomorrow: Partly cloudy, then slight chance snow showers overnight. High around 34°F (1°C). Low around 28°F (-2°C). Winds SW at 5-10 mph.
Saturday: Mostly cloudy with a chance of showers. High around 45°F (7°C). Low around 37°F (3°C).
Sunday: Chance rain. High around 45°F (7°C).



Situation for Noon Eastern Time, Thursday, February 08, 2018

Weather Systems	Weather Fronts	Precipitation Symbols			Other Symbols
H High Pressure	Trough		Snow	Rain	Fog
L Low Pressure	Warm Front	Showers	* ▽	• ▽	Thunderstorm
§ Hurricane	Cold Front	Light	*	•	Haze
	Stationary Front	Moderate	**	••	
		Heavy	⁂	∴	

Compiled by MIT Meteorology Staff and *The Tech*

Harvard Divinity Professor encourages moral growth in address to MIT community

Prof. West: 'the examined life is painful'

By Mark Goldman
STAFF REPORTER

Cornel West, professor of the practice of public philosophy at the Harvard Divinity School, delivered an address about bias in STEM institutions, titled "Speaking Truth to Power," to the MIT community Feb. 7.

At the start of his address, West said, "If [MIT] is at all similar to Harvard University, we have a lot of work to do."

West criticized MIT, stating that MIT is "in denial of the catastrophic" and instead focuses on smaller problems. According to West, catastrophes include the poor treatment of minorities and redistribution of wealth to the richest. "I come from a people whose first experience in the modern world was a major catastrophe," West added.

In alignment with his philosophical occupation, West grounded his talk in "Socratic wrestling," balancing the Socratic quote, "the unexamined life is not worth living" with his own statement, "the examined life is painful."

Citing a "culture with a multitude of distractions," West encouraged people to "attend to the things that really matter" and asked as an example, "If someone came from Mars and talked about the crisis of the American empire, would what you do have anything to do with it?"

West also emphasized the importance of moral character and encouraged integrity, honesty, courage and fortitude, mentioning that Frederick Douglass did not want to end slavery so he could enslave others.

West contrasted the value of morals to that of "neoliberal soulcraft," which focuses on the rich and smart. "I don't fetishize smartness. ... Smartness has its role, but it also has its limitations," West said. "[There are] a lot of smart people who hate Jews, who hate Arabs, who are misogynistic."

To this end, West cautioned against focusing on growth without concern for the moral character of the growth.

With this event taking place at the start of Black History Month, West stated that black history is "sacred ground": this history includes his mother and father. Later, he referenced black history as teaching him to be "highly suspicious of deodorized discourses," such as the sterilized versions of Martin Luther King, Jr., on MLK day. West attributed the increase in admitted black students in 1970 (91, compared to six in 1966) to massive, violent protests following King's assassination.

West's address was followed by a panel discussion with Joy Buolamwini G and MIT Professors Jennifer Light and Sasha Costanza-Chock, with Professor Ceasar McDowell serving as the moderator. The panelists reiterated many of West's points with a stronger focus on issues relating to technology.

"Technology and science are society," Light said, giving as an example that biologists in the 19th century claimed that white and black people were different species.

Buolamwini, who mentioned that she was the only black PhD student in the Media Lab, discussed how she founded the Algorithmic Justice League after needing to wear a white mask in order to be recognized by computer vision.

West encouraged focusing on the truth over tribalism. When talks of politics arose, the panelists and West expressed disapproval of leaders from both American political parties: West called President Donald Trump a "gangster" and criticized former President Barack Obama for conducting more drone strikes than former President George W. Bush.

West concluded the panel by re-emphasizing the importance of moral character. "I would prefer you choose to be about hope instead of talk about hope," West said.

This event was a partnership between GSC Diversity and Inclusion Subcommittee and the School of Architecture and Planning with funding from all five of MIT's schools.

The subcommittee, which was founded last semester, seeks to provide permanent representation for underrepresented minorities, LGBTQ+, international students, and religious life. In bringing West to campus, the subcommittee hoped to create wider discussion among the MIT community regarding "institutional soul-searching to understand what it means to be a black man at MIT, trans at MIT, etc.," subcommittee head Ty Austin G said in an interview with *The Tech*.

A video recording of the talk and panel is available on Facebook Live.

Community Climate Conversation brings together students, entrepreneurs, NGOs, investors

Organizations discuss climate change-related work and informally network with students

By Sheila Baber
NEWS EDITOR

The Priscilla King Gray Center, Office of Sustainability, and Radius held the MIT Community Climate Conversations event at the MIT Museum Feb. 7. With over 20 local organizations present, the event provided a space for environmentally-oriented students, faculty and staff, organizations, and investors to have discussions about climate change and network in an informal setting.

Placards such as "Policy & Advocacy," "Sea Levels & Weather," and "Energy & Technology" were placed around the room to facilitate conversations in those topics.

A key component of the event was a series of 90-second pitch presentations by local entrepreneurs and community organizations to promote their causes and advertise opportunities.

Among the presenters was Amber Houghstow '11, one of the founders of Peace Rising, a nonprofit that seeks to identify risk areas for sociopolitical instability caused in part by climate change.

Houghstow said in an interview with *The Tech* that she had "wanted to maximize my personal impact in the world" and found that "breaking the cycle" between climate change and conflict captivated her. In addition to reaching out to potential interns, Houghstow hoped to create connections and collaborate with some of the organizations through the event.

For students such as Rachel Galowich '18, the event provided an opportunity to connect with potential employers that aligned with their personal interests. "I am interested in infrastructure and climate adaptation," Galowich said in an interview with *The Tech*. "It's nice to have network sessions like this where companies are so approachable."

Other featured organizations included Climigration, a group working to establish a hub for discussions on managed retreat from coastal areas impacted by climate change; ClimateX, an online community focused on climate action and learning, sponsored by the MIT Office of Open Learning and Office of Communication; and Boston Harbor Now, a local conservation group seeking to improve Boston's waterfront and nearby islands.

A video of the pitches is available through the PKG's Facebook Live event.

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Middle and high schoolers compete in Battlecode

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Earth to Mars on virtual maps.

This year's winner was "Orbitary Graph" (Mårten Wiman, Simon Lindholm, and Aron Granberg, from KTH Royal Institute of Technology in Sweden). Team "StarMarket is Moving to Mars" (Yong Hui Lim '21, Yogeshwar Velingker '21, Calvin Yost-Wolff '21) won the Newbie Tournament, which is exclusively for MIT teams competing for the first time. Team "howrusogood??" (Lawrence Chen Benjamin Qi, Franklyn Wang, and Richard Qi from Princeton High School) won the High School Tournament for U.S. high school students. Some middle school students also competed.

The number of international and high school participants has increased in the past two years, following Battlecode's Reddit AMA post leading up to the 2017 competition. Since then, word of mouth has continued to increase participation outside of MIT, according to Gina Yuan '19, president of Battlecode.

Participation has also exploded within MIT this IAP: 148 MIT students pre-registered for 6.147, the corresponding class for Battlecode.

For the first time, Battlecode supported multiple languages. "Our goal was to give competitors greater flexibility, and also to make Battlecode more accessible to beginners," Yuan wrote. "In particular, Python is a faster and more intuitive language to code in, and is also the language of many intro programming classes at MIT."

About half of all teams used Python, about one third used Java, which was previously the only supported language, and most remaining teams used C or C++.

Web Programming Competition

In 6.148 (Web Programming Competition), about 200 students, comprised of mostly freshmen and sophomores who were new to website design and development, learned how to build websites.

"The class is difficult because the field we're teaching is hard ... a lot of prerequisite knowledge is needed," Aaron Sipser '19, president of 6.148, told *The Tech* in an interview. "Most freshmen have never done a real programming project."

Jessica Tang '20 and Shannon Peng '20, creators of Plix, won the competition. Plix enables users collaborate on pixel art.

Web development requires thorough knowledge of three languages — HTML, CSS, and Javascript — as well as the ability to use them together. Students also had to learn how to use frameworks to structure their code.

Spiser explained to *The Tech* that a lot of students in introductory programming classes work on small snippets of Python code that do not have tangible applications to industry. However, Spiser believes that practicing web development is directly applicable to life outside of MIT.

6.148 is broken down into two divisions: casual and competitive. Many freshmen are drawn to the casual division because of its smaller time commitment

"Our group was up from noon until 3am every day the last eleven days of the project. The last day of the project, we stayed up for 45 hours to get it done," Sipser said about his experience in the competitive division as a freshman. "We had to [both] learn the material and make the website."

He encourages students to participate in the competitive division. "Dive into it, and have fun with it," Sipser said.

SPXCE created in response to student input

SPXCE, from Page 1

Director of LBGT Services and a staff officer at SPXCE, wrote in an email to *The Tech*. "Our goal is for the SPXCE to be a home away from home."

The new center includes a social lounge, study space, and kitchenette.

Oyola explained that several student communities, including the Black Students' Union, Black Graduate Student Association, undergraduate women, and the LBGTQ community, recommended that an Intercultural Center be built.

Nelson was a "champion for bringing this to fruition with the support of several others and feedback from a group of students," wrote Oyola.

SPXCE is funded by the DSL.

Andy Lambert '21, who attended the grand opening on Monday, said in an interview with *The Tech* that they "really appreciate the effort that was put into opening a space dedicated to education and diversity." Lambert pointed out that there are now places for LBGTQ students to visit on both the west and east sides of campus — SPXCE and the Rainbow Lounge in Building 50.

Karina Hinojosa '20, who was involved in the planning and development of SPXCE last year, wrote in an email to *The Tech* that as the president of the student organization G@MIT (Gay at MIT) and a minority student, she understands that "feeling comfortable and welcome in an academic and social environment is important for mental well being and success."

"I think the SPXCE is a great place for people in the intersections of identities to feel at home and for those trying to participate actively in these intersections of race, gender, sexuality and ability," Hinojosa added. "I love that it's designed as a place for casual discussion of topics relevant to many MIT students as well as a place to help encourage active ideas for the betterment of the MIT community."

EMMA BINGHAM—THE TECH

A sign announcing the number of days Star Market would remain open stood at the front of the 20 Sidney St. store Feb. 3.

PING XU—THE TECH

MIT Shotokan Karate in practice with 50 students from China's Changzhou University.

EMMA BINGHAM—THE TECH

Representatives of MIT's new Intelligence Quest initiative handed out T-shirts and M&Ms in Lobby 10 Feb. 1.

get on the front page

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MIT, you've got commitment issues

It's time to walk the talk

By Jeremy Poindexter

MIT, we need to talk. When we first met, I thought we were perfect for each other. But even after lovely walks down the Infinite and nights under the dome, I've realized something that I just can't hold inside any longer: MIT, you've got some commitment issues. You may not want to admit it — and at first, neither did I — but our friends have been telling me this for a while. At first, I thought they were being unfair to you and our relationship. Now, I know they were right.

That being said, I still think we could be partners for life. But we need to discuss some things before I put that Brass Rat on my finger. Because sometimes it seems like you don't want to commit to this relationship, even though you say you do. So I need you to *show* me — not just *tell* me — that you mean it.

Let's start with race and diversity. I know you've been working on it — and to your credit, undergraduate minority representation has improved recently. But that's only one part of the problem; the diversity statistics for graduate students and faculty are *awful*. For most of my time at MIT, I've been the only African-American graduate student in my department of 170+.

I know it's not all your fault that the numbers are so bad. But haven't we talked about this before, and agreed this was a problem we'd work on together? After all the committees, reports, and recommendations about these issues, what have we learned, and what is our plan for follow-up? Do we yet understand *why* our graduate and faculty minority populations remain so low? Can we critically reevaluate the value of the diversity initiatives we do have at MIT to lay out a pathway toward increasing underrepresented graduate student and faculty numbers by a factor of two and three, respectively—as was proposed over a decade ago? And if we don't know how to get there yet (which is okay), can we still commit to trying to figure it out together?

I'm worried because I've seen this behavior before. I know you mean well, MIT, but sometimes you'll agree to tackle a problem, discover it's not "purely" a "technical issue" (as if most problems are), and proclaim it's beyond your control or drag your feet because it's not comfortable to deal with. To be honest, we can do much better. This place is filled with people masterfully skilled at understanding and solving complex problems; surely, we can apply similar methods toward tackling race, diversity, and equity issues at our Institute.

I will say that I know some amazing, passionate, and committed individuals on campus dedicated to this kind of work, and I applaud them. But too many times, MIT makes it so *difficult* for them to thrive and succeed. These passionate individuals find themselves constantly stuck in molasses made of internal politics and institutional power structures, having to fight incredibly hard just to make an inch of progress. We need to turn up the heat, give their causes some energy, and relieve this resistance to let these champions gain some much-needed momentum.

I've seen firsthand that climate action at MIT is another issue where individual champions carry the burdens of many, and where commitments fall through the cracks. MIT, we talked back in 2006 about "walking the talk" by incorporating more environmentally sustainable practices into the fabric of campus life. Yet a decade later, we're still having the same old conversations — just look at MIT's Climate Action Plan. How much more deliberation do we need before actually committing to *real* climate action like decarbonizing campus energy generation (which Harvard just committed to), improving food and waste systems management, and making decisions about how to leverage MIT's relationship with fossil fuel interests? I'm committed to figuring these things out, but I want the same commitment from you. After all, we're a team!

Truthfully, MIT, my mind, hand, and heart are all aching because I really care about and respect you. But sometimes that causes me anguish; sometimes you make me think that I'm crazy and not good enough for you. Unfortunately, there are days when my mental health really suffers as a result.

MIT still has a long way to go to be a mentally healthy place. We've done a much better job discussing this recently; that's great. I know that mental health can be a hard thing to talk about, but we *all* play a part in shaping this aspect of our culture. How many times have you heard someone else humble bragging (or just straight-up boasting) about how late they stayed up to work on a problem set or in lab? How many times have you bragged *yourself*? It's okay to admit it; I've bragged in this way before, too. Perhaps the first thing we can all do is acknowledge that this "microaggression" doesn't help us.

Can we commit to building a more nurturing environment for ourselves and each other? Some say that the stress associated with mental health issues is just "part of MIT's culture," as if there's nothing we can do; as if it's some inevitable consequence of the ambition and hardworking spirit that permeates MIT. Well, I've been to plenty of other places that are full of ambitious, hardworking people and *don't* share this repressive quirk of MIT culture. Don't we owe it to ourselves to commit to shaping our own culture for our own betterment? Working for "the betterment of humankind" should start with bettering ourselves.

People, institutions, and the relationships within all grow and change over time. We can't be afraid of that; in fact, we should embrace it. Perhaps in the best relationships, partners grow alongside one another, committing to both give and take in a mutual exchange built on reciprocal trust and respect.

So are you ready to commit, MIT?

Let me close by speaking personally, as Jeremy. I'm a fifth-year PhD student. I've grappled with being one of very few graduate students of color in Materials Science. I'm committed to fighting climate change both inside and outside the lab. I've been learning how to manage relationships and avoid burnout in the intensified academic environment of MIT — sometimes, the hard way. And after countless conversations with friends and colleagues at MIT over the past several years, I finally felt ready to share my thoughts. Perhaps if you share yours, too, we can build the trust to commit toward solutions together.

Jeremy Poindexter is a graduate student in the Department of Materials Science and Engineering.

CORRECTIONS

A Jan. 11 opinion piece claimed that, "The Christian population of Jerusalem ... is not permitted by the Israeli Occupation authorities to put up Christmas decorations." Although various Christmas celebrations were canceled in response to President Trump's declaration recognizing Jerusalem as Israel's capital, there were in fact Christmas festivities held in Israel at the time. In fact, the Jerusalem municipality freely distributed Christmas trees to residents.

The article also said "there has been no international support for" the claim that Jerusalem is the capital of Israel. While the UN has, by majority, voted "no" on this claim, seven countries — Guatemala, Honduras, Marshall islands, Micronesia, Nauru, Palau, and Togo — sided with the United States in the UN vote. Thirty-five others abstained.

An article in last week's issue about the results of a graduate student unionization survey contained data figures in the written article that were inconsistent with the accompanying infographics. The infographics incorporated several more survey responses than the data in the article, which was captured at an earlier date.

An article in last week's issue about the restoration of the Kendall Band incorrectly stated Seth Parker's undergraduate alma mater. He is an alumnus of Brown University, not of MIT.

OPINION POLICY

Editorials are the official opinion of *The Tech*. They are written by the Editorial Board, which consists of Chairman Karleigh Moore, Editor in Chief Emma Bingham, Executive Editor Patrick Wahl, Contributing Editor Vivian Zhong, and Opinion Editors Steven Truong and Fiona Chen.

Dissents are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, **columns**, and **editorial cartoons** are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to *letters@tech.mit.edu*. Hard copy submissions should be addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority. Once submitted, all letters become property of *The Tech*, and will not be returned. Letters, columns, and cartoons may also be posted on *The Tech*'s Web site and/or printed or published in any other format or medium now known or later that becomes known. *The Tech* makes no commitment to publish all the letters received.

Guest columns are opinion articles submitted by members of the MIT or local community.

TO REACH US

The Tech's telephone number is (617) 253-1541. Email is the easiest way to reach any member of our staff. If you are unsure whom to contact, send mail to *general@tech.mit.edu*, and it will be directed to the appropriate person. You can reach the editor in chief by emailing *eic@tech.mit.edu*. Please send press releases, requests for coverage, and information about errors that call for correction to *news@tech.mit.edu*. Letters to the editor should be sent to *letters@tech.mit.edu*. *The Tech* can be found on the World Wide Web at *http://thetech.com*

```
File   Edit   Options   Buffers   Tools   Im-Python   Python   Help
from new_skills import *

def learnMarketableJobSkills():
    return linux, OSX, javascript, applescript, perl, python, PHP

if self.interest == True:
    print "E-mail join@tech.mit.edu"

----:----F1 joinTechno.py      (Python)--L1--Top-----------------------------------
```

ADVICE

The STEM of the problem

Auntie Matter on insecurity and tech culture

PATRICIA GAO—THE TECH

By Auntie Matter

If you have questions for Auntie Matter, please submit them at tinyurl.com/AskAuntieMatter. Some questions have been edited for length or clarity.

Dear Auntie Matter,

I'm currently dating this guy who used to win national math competitions and is overall much better at math than I am. He frequently enjoys solving math contest problems that I can't even process, and I can't help but feel inferior. Should I do anything about this, and does he think any less of me because of it?

— Feeling an Inequality

Dear Inequality,

Why are you dating this young man? Is his math ability the most important reason? Or even the second, third, or tenth most important reason? I would be willing to bet that your answer is no, and that if you asked your boyfriend the same question, his answer would also be no.

If you are worried about his opinion of you, you should ask him. And if this fellow is indeed trying to make you feel lesser because his AMC score is greater, you should dump him faster than he can take an integral.

However, most likely, he will say that of course he doesn't think you are inferior. The problem then is only your own insecurity.

This is a very MIT problem. We are surrounded by so many people who are so clever at math and who value math skills highly that it's completely understandable to feel insecure — especially when those people are your close friends and partners.

With that being said, how can you combat this insecurity? I will offer several solutions.

One set of solutions involves communicating with your boyfriend on this matter. You can talk about how this problem has been worrying you, and ask him for reassurance, or ask him what he likes about you. And if you don't like the role math has in your relationship — for example, your boyfriend is showing off too much for your taste, or the two of you talk about math too much — you should bring that up with him. Alternatively, if you want to understand his interest in math better, you could ask him what he likes about solving these math problems, or you could ask him to explain a few of them. Lastly, in order to make it feel more like an exchange, you can find an area where you have more skills than him and you can teach him things.

The other set of solutions comes from within yourself. You can learn to think about yourself and your math skills in a different way. I think you know, as any reasonable person does, at least upon reflection, that math skills do not equate with self-worth. That means your boyfriend is not a superior person (and you are not an inferior person) because of how many math contest problems he has solved or how many Course 18 classes he is registered for. If you can take this to heart, you can be much more secure in your relationship.

Dear Auntie Matter,

How do you find a community at MIT as a social sciences/humanities person? Many people have made fun of my interests when I've expressed that I'm far less interested in STEM than I am in economics, political science, and the humanities. I've received the question "Why did you even choose MIT?" so many times! The fact that people always talk about their HASS classes with disgust makes me feel sad. I've tried to convince some of my friends that social sciences and the humanities are interesting and important, but most of them don't care and I'm getting sort of exhausted.

— HASSled

Dear HASSled,

Auntie Matter, no stranger to HASS herself, sympathizes. She has found success in this area and so can you.

There are two types of solution to your problem, and I encourage you to pursue both. First, you can seek out activities and groups that will attract other HASS students. Second, you can change the way you experience dismissiveness towards your area of study.

There are a surprising number of communities on campus that value the social sciences and humanities. Get involved in your favorite humanities department — they often have seminars and events you can attend to meet like-minded people, such as the Literature Department's Literature Tea Time every Monday afternoon. If you're a current freshman or sophomore, consider applying for the Burchard Scholars program next year. Concourse, a freshman learning community centered around the humanities, offers upperclassman courses and seminars that any MIT student can sign up for.

Communities that draw humanities students are not limited, however, to the academic. There are numerous student groups you could consider joining, including but not at all limited to: MIT's vibranttheatre-community, the MIT Educational Studies Program, Rune Magazine, and last but not least, this very publication.

You write that your friends' dismissiveness of your interests makes you feel sad. I hope that your actual friends do not make fun of your course of study. If they do, you should get new friends, not because you don't share interests, but because your friends should be respectful of you. You should certainly bring up with them how their dismissiveness makes you feel. You should expect more of your friends, and you should ask it of them.

You don't just seem bothered by your friends' opinions, however. You seem bothered by the anti-HASS aspect of MIT's culture. This, HASSled, you have to get over. You can't affect it, other than by demonstrating that you don't care what people think. People just put down the humanities at MIT to make themselves feel better about what they are doing. It would be reasonable for you to think "many MIT students are incorrect about how valuable the humanities are," but it would not be reasonable for you to take that fact personally. With all the love in the world: toughen up, buttercup.

BY THE NUMBERS

Nine lies MIT students tell themselves at the beginning of the semester

They say the first stage of grief is denial, and we're real good at that

By Karleigh Moore and Patricia Gao
EDITORS

The first week of classes is coming to an end. You've got a lot on your plate, what with adjusting to your new schedule, planning for your future (or continuing to deny its existence), and getting down to business with freshly-assigned psets. Whether you'll get used to it or not, you're probably waking up earlier than usual and hyping yourself up with some Positive Thoughts About The Semester. But some of them aren't true ...

Without further ado, here are 9 lies you've most likely told yourself at the beginning of the semester:

Taking seven (plus) classes is totally doable. Okay, okay. So some folks can handle a huge courseload just fine. But these people are exceptions — like, four-standard-deviations-above-average exceptions. The rest of us should remember: 36 units makes a full-time student, and there's nothing wrong with steady four-class semesters.

You'll go to sleep on time. Right, so, at two in the morning?

Okay, so you might go to sleep late, but at least you'll have a regular bedtime. And wake up at the same time every day. And make it to your 9 a.m.s. And brush your teeth. And discover Narnia.

You'll actually work out this semester. This one might actually be true, until the semester catches up to you and you start convincing yourself that walking to class, shopping (but who are we kidding? You use Amazon more often than necessary), and doing your laundry count as exercise.

You won't miss a single recitation. Even though you never learn anything from your TA. Even though you need to catch up on sleep. Even though your recitations conflict with the one PE class between you and a pirate's license. Recitations are important.

You're going to office hours. And they'll be for your TA, not just the TA who has the office hour closest to the pset deadline.

You'll be on top of your homework! You'll be so far ahead of deadlines that you won't need to remember them! Not that you remembered them back when you weren't on top of your homework, but that's beside the point.

You'll join / be more active in more clubs this semester. Because not only are networking and beefing up your resume with leadership positions important, they're fun! (Actually, though, you shouldn't completely ignore the MIT community. We like you. Plus we have lots of organizations with plenty of fillable positions, many of which can be enjoyable. You'd like writing for The Tech, yeah? *nudge, nudge*)

You'll figure out what you're doing with your life. Adulthood isn't make-believe! Someday you'll know exactly how to succeed, and how success looks, feels, sounds, tastes ... and smells. You're sure of it.

But, of course, you're not at the end of the rainbow yet, and you're pretty sure that reaching it involves schoolwork here at MIT. Luckily, you have these lies to console yourself with...

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MIT application essays that worked

'Legolas is my favorite character'

Prompt

What attribute of your personality are you most proud of, and how has it impacted your life so far? This could be your creativity, effective leadership, sense of humor, integrity, or anything else you'd like to tell us about. (200 – 250)

Response

Contrary to common belief, the reason why the elven warrior Legolas is my favorite character in *Lord of the Rings* is not because he's an amazing archer or because he's graceful in speech and battle. It's because he is able to be optimistic when others despair, precisely the part of my personality that I have found to be of the greatest use to me and those around me.

My optimism has drawn others to me, even if they, like the student I tutor, occasionally grumble "How can you be so darn *happy* all the time?" My friends depend on me to retain composure and positivity when hopes are dashed or when plans are disappointed. For myself, optimism has been the force that allows me to face challenges and endure defeats anywhere from exams to research projects to competitions, and my life has been all the happier for it.

Optimism also allows me to feel content with my ability to help others. Perhaps the greatest effect my optimism has ever had was on the aforementioned student. I was paid to improve her SAT score, but I am far prouder of having improved her formerly dour attitude. She falls into depression much less now, and draws more satisfaction from life. If the best and most fulfilling thing a person can do in life is to make someone else's life better, then I achieved it through setting an example with my own optimism — something no demonstration of intelligence could have ever done.

— Vivian Zhong

'I consider my work to be fun'

Prompt

What attribute of your personality are you most proud of, and how has it impacted your life so far. This could be your creativity, effective leadership, sense of humor, integrity, or anything else you'd like to tell us about. (200 – 250)

Response

Although there are many aspects of my personality of which I am proud — my sense of humor, dedication, and a healthy dose of skepticism — I've realized that most positive aspects of my personality trace back to one root: my love of learning.

Like most teenagers, I spend a lot of time on the Internet. Although I like a nice baby panda and enjoy a cat chasing a laser beam as much as the next girl, I pass the time not with cute animals but by learning about world history or relativity through Youtube channels like CrashCourse or Minute Physics.

Because I work pretty constantly, people I've just met often assume I do nothing "for fun"; however, I consider my work to be fun. I play tennis and enjoy spending time with my friends, but the highlight of my week is often going to class at Columbia on Saturdays, spending my morning learning about the flow of coal in the global economy or the function of restriction enzymes rather than sleeping in. I hate leaving problems unsolved or opportunities untaken. Others may perceive this quality as a drive to succeed, but I merely experience it as a drive to seek out new and interesting experiences.

Whether I am learning to bake, translate genetic code into protein or construct an equilateral triangle using only a compass and a straightedge, I enjoy the process just the same. This trait makes my life incredibly enjoyable — my work turns into play.

— Hannah Rudoltz

DID YOUR MIT ESSAYS GET YOU IN?

The Tech is collecting successful application essays (**hint: yours!**).

Email your pieces to *cl@the-tech.mit.edu*!

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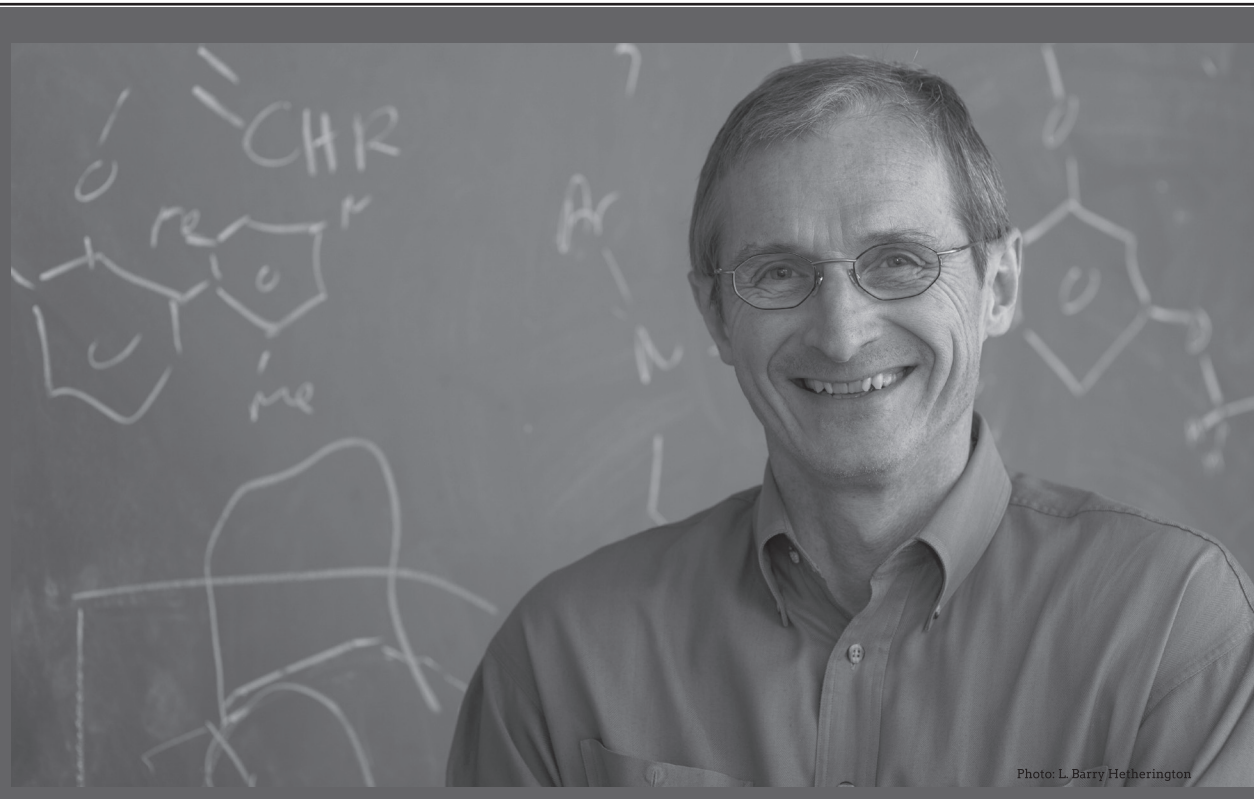

Photo: L. Barry Hetherington

Richard Schrock
F G Keyes Professor of Chemistry
Department of Chemistry

Thursday, February 15, 2018
4 pm
Huntington Hall (10-250)

Adventures in Inorganic Chemistry and Catalysis

All members of the MIT community are invited

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What kind of idea? You tell us! The only requirements are:
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2. Submit your application to the Student Activities Office
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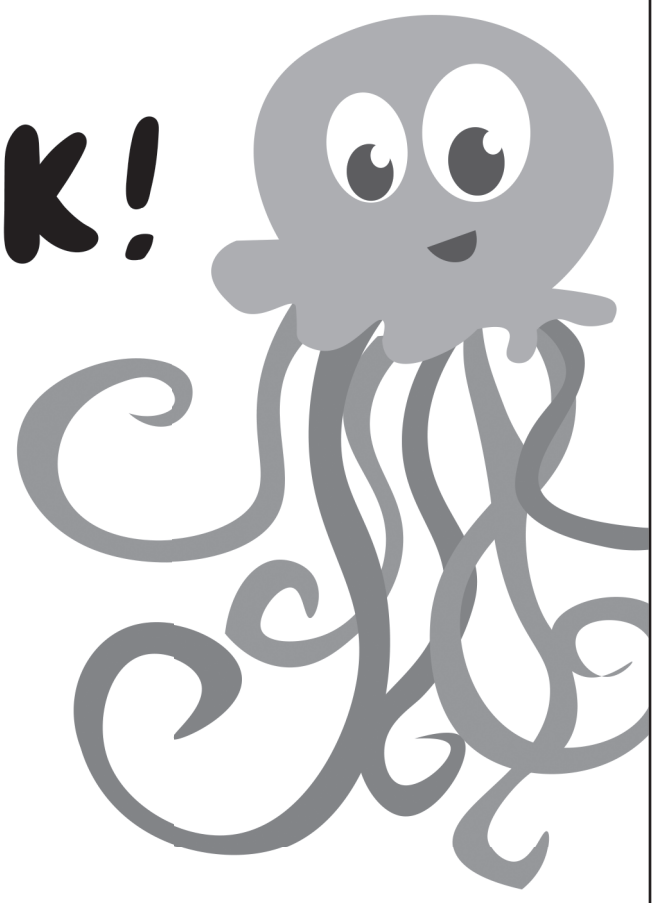

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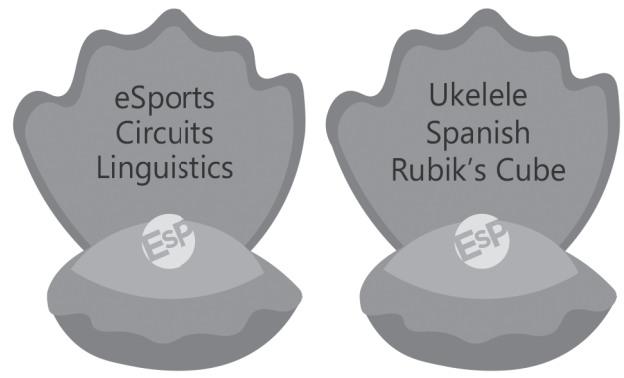


secular society of MIT

CELEBRATING THE 209TH BIRTHDAY OF BIOLOGICAL EVOLUTION THEORY PIONEER, CHARLES DARWIN

EVERYTHING YOU KNOW ABOUT SEX IS WRONG

PART 1: THE GENDER BINARY

Why does sex exist? What are males for? Is the gender binary real? And why does a microbe have the swingingest sex life of all? At our Darwin Day 2018 event, Abby Hafer (scientist, educator, speaker, and author of *The Not-So-Intelligent Designer*) will present on the biological evolution of sex, discuss facts and myths about sex and gender in the animal kingdom, and critique notions of sex and sexuality based in religious worldviews.

THU, FEB/15 | 7:15PM | 4-270

[free entry | poster giveaway] **[ssomit.mit.edu]**

Super

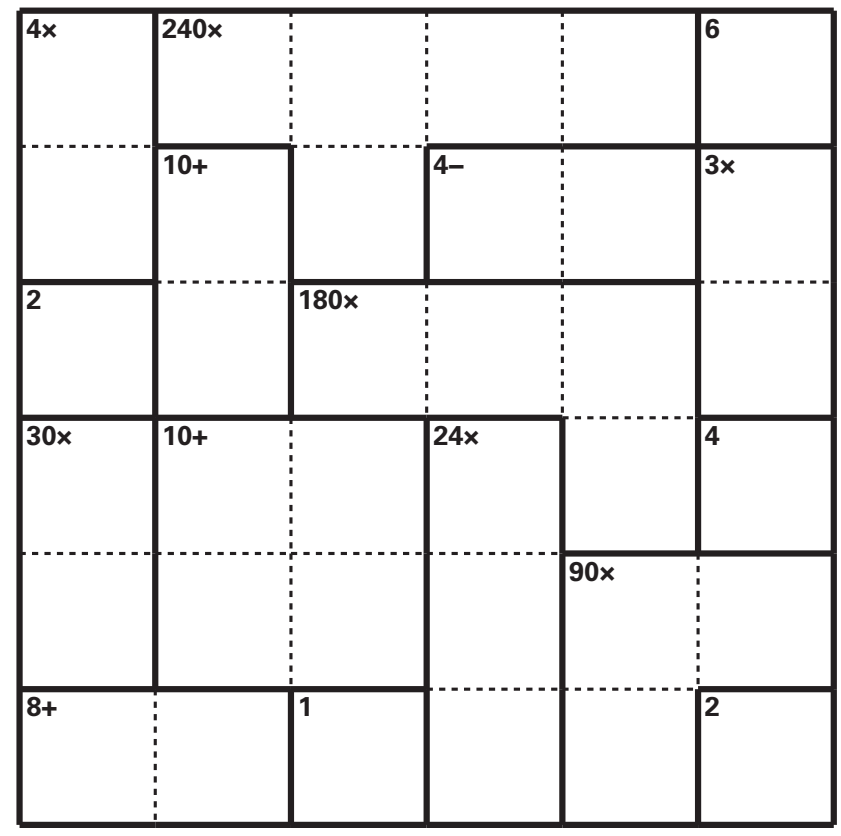
Solution, page 15

	9	5	4					8
		6			2	5		
7						4		3
	1			7				5
3			2		4			6
8				1			7	
5		8						2
		3	8			6		
6					3	8	5	

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Bowl

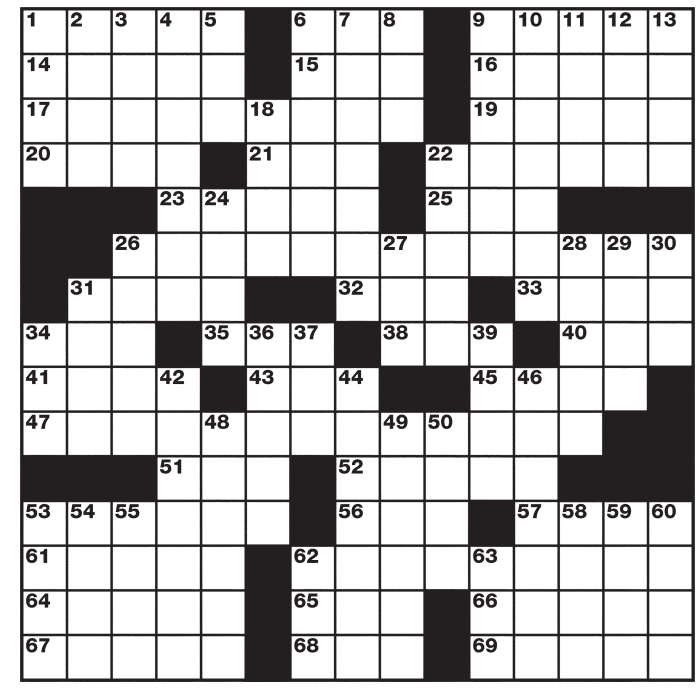
Solution, page 15



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

Sounds Quirky by Mark McClain

Solution, page 15

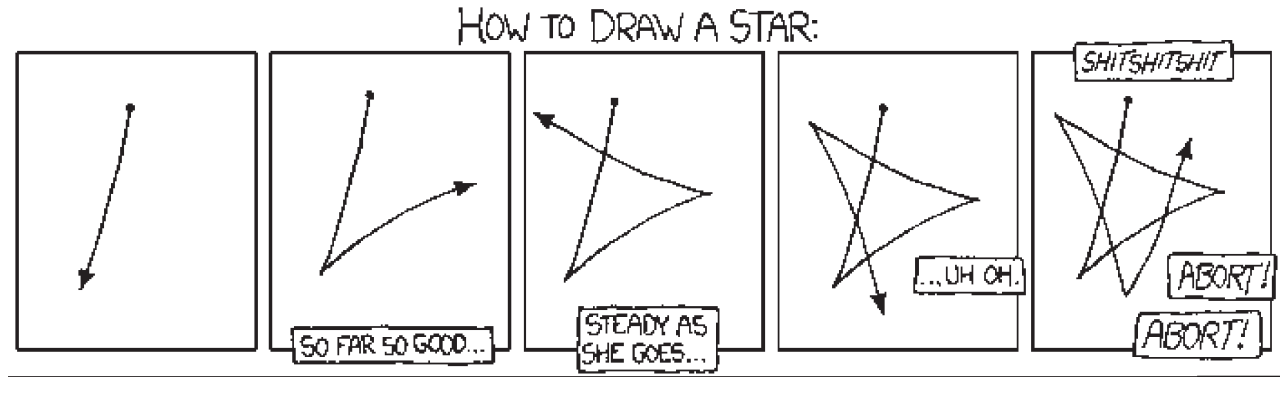


ACROSS
1 Big name in Asian exploration
6 Hot tub
9 Ventricle outlet
14 Clamorous
15 Product for pavers
16 Circumvent
17 Budding dissident
19 Student's stadium sign
20 Starter like contra-
21 Spot-on
22 Works for nine
23 Canon alternative
25 Certain savings vehicle
26 Atlas, for instance
31 Fail to meet
32 Feel contrite about
33 Barcelona blue
34 Sinister
35 Wordsworth work
38 One more than due
40 Defensive rocket: Abbr.
41 Hence
43 Just like
45 '70s film viewers
47 Wardrobe allowance, perhaps
51 Stumblebum
52 "It's the end of __"
53 Worthy of worship
56 Arm art
57 Batting-practice structure
61 Bold poker bet
62 23rd-century captain
64 Lay out
65 Foundry delivery
66 Skateboarder's leap
67 They may be sleepers
68 Subj. for new arrivals
69 Digs made of twigs

DOWN
1 Reader at Bill's first inaugural
2 Presley's middle name
3 Laugher of a game
4 Fox and hounds
5 End of UNESCO's URL
6 Lethargic state
7 Law firm figure
8 Genesis 6 creation
9 Off the ship
10 Battleground of 1945
11 Frosty coating
12 Easy run
13 They're pressed for cash
18 Box office receipts
22 More gracious
24 In that event
26 Hill's crest
27 Bolt surrounder
28 Arkansas' __ National Forest
29 Barbecue applications
30 Airline with an Amsterdam hub
31 Das Kapital author
34 Small buzzer
36 Out of fashion
37 Connecticut collegian
39 Unceasingly
42 Small wind instrument
44 Gamers' icons
46 Fireplace sound
48 Tips over
49 Woodworker's coating
50 Sampras of tennis
53 Bratty talk
54 Purina brand
55 Sheet music symbol
58 Feels off
59 Sandpaper substance
60 Scratches (out)
62 "Average" fellow
63 Family fellow

xkcd
A WEBCOMIC OF ROMANCE, SARCASM, MATH, AND LANGUAGE
by Randall Munroe

[1029] Drawing Stars

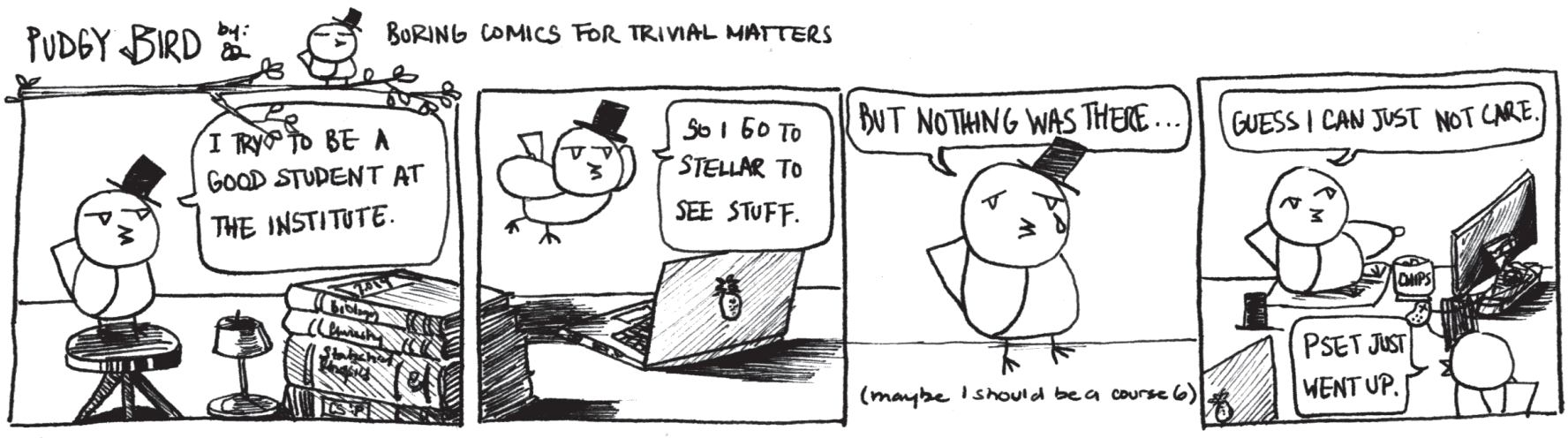


Screw these 36-degree angles. I'm converting to Judaism.

FUNFUNFUNF

FUNFUNFUNF

Pudgy Bird by Ivy Li

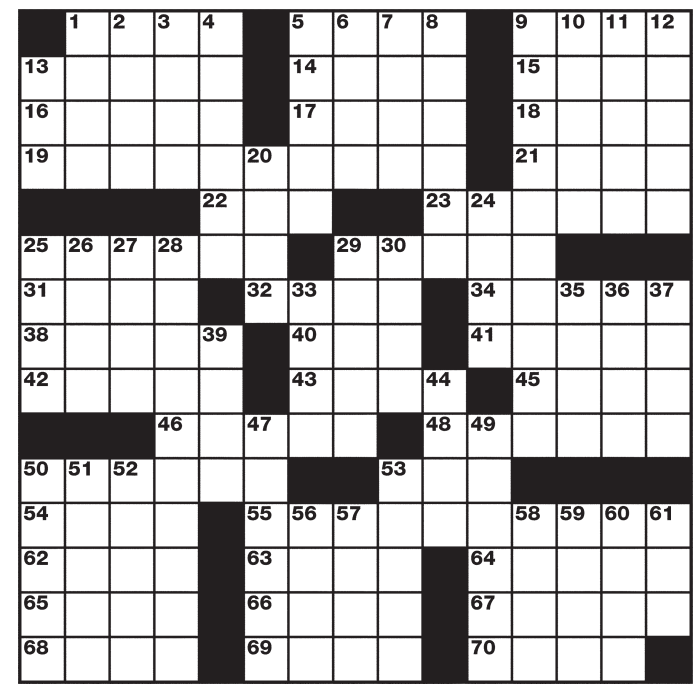


Talk a Lot or Not by Billie Truitt

Solution, page 15

ACROSS
1 Collection of cows
5 Hollywood headliner
9 Touches on the shoulder
13 Fragrant wood
14 __-Cola (Pepsi rival)
15 Cajun veggie
16 Indoor sports venue
17 Be entitled to
18 Walked heavily
19 Very talkative
21 Coyote's call
22 Dollar bill
23 Not in secret
25 Chefs' garments
29 Become blocked
31 Hamburger meat
32 Oil cartel
34 Tips of the ears
38 Make by hand
40 Have lunch or dinner
41 Deceive
42 Shopping binge
43 Step __ (hurry)
45 Within reach
46 Cautions (about)
48 Playpen toy
50 "Prove it!"
53 Point at a target
54 Mexican food that's folded
55 Very talkative
62 Dockside platform
63 Territory
64 Fry lightly
65 Just slightly
66 Light browns
67 Business bigwigs
68 Muffin pans
69 Approximations: Abbr.
70 Dinner plate

DOWN
1 Long sandwich
2 Biblical garden
3 Used a doorbell
4 Utilize, as sources
5 Film excerpt
6 Frog cousin
7 Land measure
8 Chosen by chance
9 Not very talkative
10 Ohio tire city
11 Roam with stealth
12 "Sorry to say . . ."
13 Baseball great Ripken
20 Not __ many words
24 Tug (on)
25 Kindergarten basics
26 Offender, in cop lingo
27 Caboose's locale
28 Not very talkative
29 Denim pants
30 Start of a play
33 Lowly laborer
35 Borscht vegetable
36 And others: Abbr.
37 Angry
39 Competitive side
44 Quartet minus one
47 Money-back offer
49 Brought a smile to
50 March 17th honoree, for short
51 French-speaking Caribbean country
52 Blue part of a globe
53 Gather together
56 Nest-egg plans
57 Polite fellow
58 Car with a meter
59 Colors
60 Engrave on glass
61 __ Moines, IA



Philly

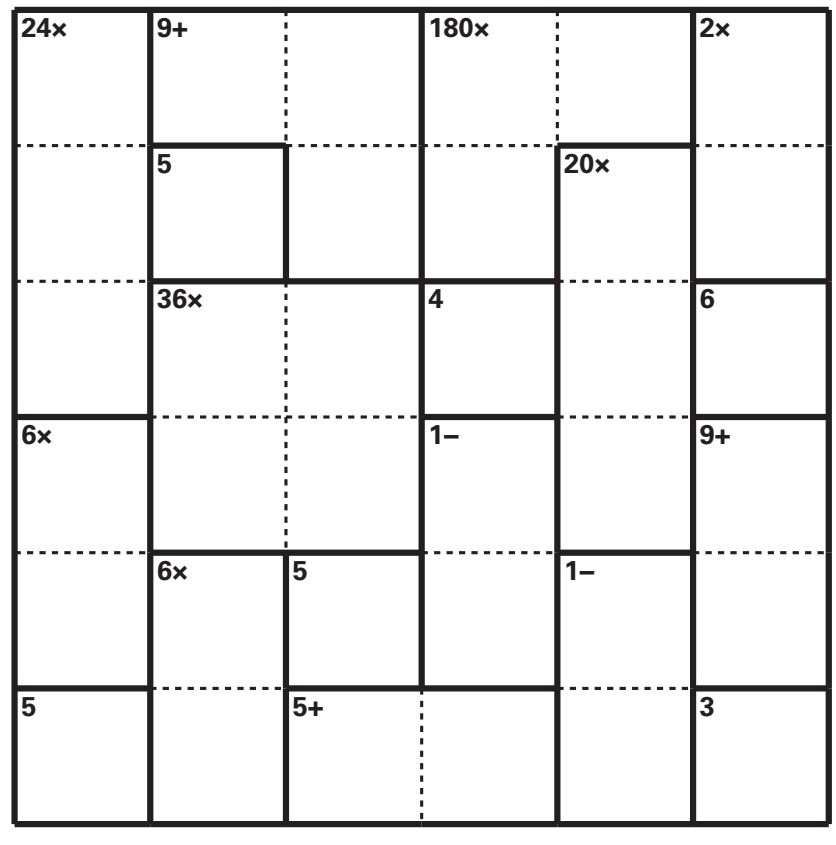
Solution, page 15

3		9	8		1	6		
	1	8			5			
							5	
		6		7				9
	3	5	4		9	1	6	
1				5		4		
	7							
			5			2	4	
		3	9		6	7		5

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Special

Solution, page 15



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

FUNFUNFUNF

ARTS ARTS ARTS

CONCERT REVIEW

Rostam hasn't lost'em

Ex-Vampire Weekend member has still got his chops

Rostam Opening Act: Joy Again

Museum of Fine Arts, Boston

Feb. 3, 2018

By Patricia Gao
STAFF WRITER

I knew it.

I'd guessed months ago, of course, but now I know for sure: he smiles while singing.

The "he" in question is all-around musician Rostam Batmanglij, whose stage name is his first. I was lucky enough to attend a concert of his in Boston over the weekend — it was hands-down the prettiest concert I've ever been to.

The venue was a theater in Boston's Museum of Fine Arts, which seems a bit unexpected given Rostam's status as an indie music maker. Of course, Rostam himself is not a typical member of his genre, if he is a typical anything. In addition to performing, the 34-year-old Columbia graduate composes and produces music, collaborating with artists like Carly Rae Jepsen and Charli XCX. He is perhaps best known as a founding member of Vampire Weekend, though he left the band in 2016. Since, he has released a solo album, titled *Half-Light.*

It may already be clear from my excessive background knowledge of Rostam that I'm a fan of Vampire Weekend (a band known for its reference-heavy lyrics). But though I initially listened to Rostam because of his origin group, I *still* listen to him because his music is, quite simply, good. It's similar to Vampire Weekend's, but sweeter: the agreeable tunes are accompanied by more accessible lyrics; the complex instrumental rhythms are less harsh. Many of Rostam's songs are evocative of a pleasantly nostalgic summer evening.

His performance on Saturday gave me the same feeling. It was almost unbelievably calm, especially when contrasted with the ferocious, high-intensity pre-show set from the five-piece Joy Again. Rostam stood by a microphone, with a drummer on his right and four string players, including a cellist, seated on his left.

Though he was on center stage, Rostam clearly didn't want his position to be intimidating. He chatted up the audience between songs. He joked about his harmonica (and neck holder, since he had a guitar in hand). He even asked the people in the lighting box to bring the stage into darkness. That way, it was easy to focus on the sounds, although they were accompanied by the bright screen behind Rostam, which displayed slowly-moving, peaceful images throughout the show, from a desert-sky time-lapse to a rotating paisley design, overwritten by Rostam's name in Persian script.

It was nice to be in a theater seat, not jostling for a view of the stage, able to lean back and soak in the untroubled vibrations of Rostam's creations. There was something very special about being able to hear tunes I know and love performed live, but not feeling pressured to shout along, or cheer louder than anybody else. I left the concert with the sense that I'd been blessed. Rostam had played a whimsical, unreleased track; he'd gotten the audience to sing a little "ba ba bum" as the background of a certain piece; he'd asked us to stand up for the very last song, to which everybody swayed.

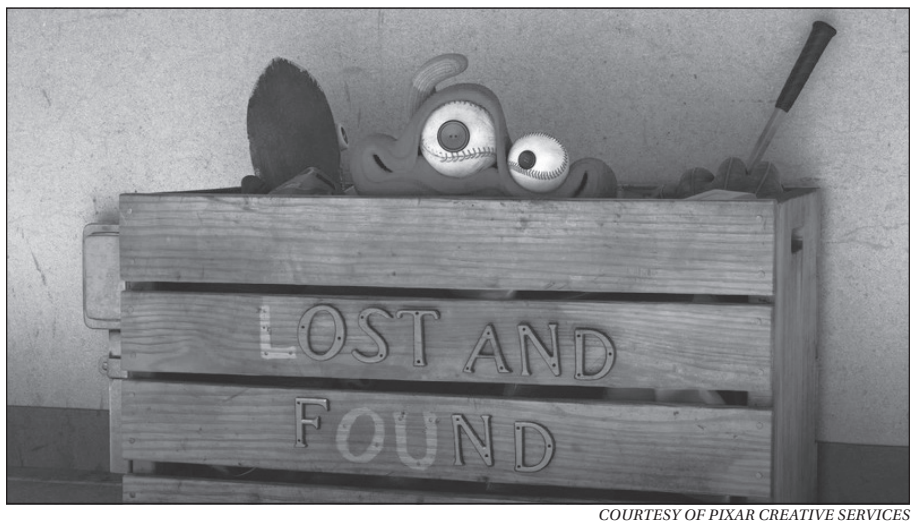
Seeing a musician live is often disenchanting. You might discover that your beloved singer lip-syncs, can't dance, or is too afraid to hit the high notes. They might not be who you thought they were based on their records.

But seeing Rostam was not like that. I always thought, listening to his releases, that he sounded like he smiles when he sings. And he really does.

OSCAR ANIMATED SHORTS REVIEW

2018 Oscar nominated animated shorts

Five animated shorts range from the heartwarming, to the intriguing, to the downright strange



COURTESY OF PIXAR CREATIVE SERVICES

Lou only wants to be found at the Lost and Found.

By Leah Yost
STAFF WRITER

Kobe Bryant's tribute to basketball was touching and well made. The short is narrated by Kobe himself as he tells of a little kid who lived, breathed, and dreamed basketball before becoming a professional player. Six-year-old Bryant's game with only a trashcan and a rolled up tube sock is overlaid with the Lakers championship game. Bryant tells of how much that six-year-old loved the game, how he gave the game his all. In return, basketball gave that little boy his Lakers dream. The charcoal drawing style of animation was engaging and its fluidity matched the transposing narrative between the older and younger Bryant, and its looseness gave the impression of a game without needing to show all the details. It is an excellent short, and at only five minutes it is engaging enough to spare the time.

Negative Space: Directed by Max Porter and Ru Kuwuhata

Negative Space is adapted from a poem that tells the story of a connection between a father and a son over the art of effective packing. Of all the shorts, *Negative Space* had the most unique style. It's a stop-motion short, the only one in the lineup, and I found that it added a bit of caprice to the story. It was whimsical and while the relationship between the father and son is seen as cold in the poem, the directors made it seem as though there was something special between the two in between every sock or crease of the shirt, which I appreciated especially with the sad ending of the poem.

Lou: Directed by Dave Mullins

My personal favorite short, *Lou* is about an animated creature made from items in a playground lost-and-found who teaches the schoolyard bully how to give rather than take. The shapeshifting, expressive creature named Lou rotates his various parts (a slinky, a hoodie, two baseballs, etc) into new forms to battle the bully for the other children's toys. I enjoyed how clever it was, and how engaging the movement of each scene was. If you need an uplifting break in between psets, watch this short. You won't be disappointed.

Revolting Rhymes: Directed by Jakob Schuh and Jan Lachauer

At close to a half hour, by far the longest of the nominated shorts, *Revolting Rhymes* needed to carry a lot of momentum to get an audience through. This short is based on Roald Dahl's book of the same name, where the classic fairy tales get a slightly strange twist. In this short, the stories of Snow White, Little Red Riding Hood, and The Three Little Pigs are combined. It is told from the point of view of a wolf and from his side, and little Red is not so sweet and innocent. The content was entertaining enough, albeit strange, to hold for the entire 30 minutes, and the style of animation was well done, earning this short a solid three stars.

Dear Basketball

Directed by Glen Keane

Written by Kobe Bryant

Garden Party: Directed by Gabriel Grapperon, Florian Babikian, Victor Caire, Vincent Bayoux, Théophile Dufresne, Lucas Navarro

No doubt about it, *Garden Party* is well made. The animation is crisp and clean and the details shine through. Yet the story was always unclear and dragged on for too long for the surprise ending to make up for it. The audience follows around a couple of frogs as they make their way around what appears to be an abandoned mansion. Clues are picked up here and there to indicate that all is not as it seems, but I was too bored to care. I wasn't invested in the short like I became in the other ones. So, while the style was good, it couldn't make up for content.

EPISODIC REVIEW

The customer's always right

When automated factories rule what's left of the world, who needs who?

By Torri Yearwood
ARTS EDITOR

This is the second part of my episode-by-episode review and analysis of the new Channel 4 television show Philip K. Dick's Electric Dreams. This week's episode was called "Autofac", based on the short story of the same name.

As usual, I encourage you to check out the show and the book before reading any further because:

<SPOILERS>

Both media take us to the near future: we've invented completely automated factories ("Autofac"s, if you will) to satisfy our every need, and promptly blew ourselves back to the stone age with nuclear weapons. Ironically, the last thing standing are these creators of consumer goods — notably lacking in consumers. True to their purpose, however, the factories keep working, creating more basic needs in the book, and creating consumers in the show.

In the book, one of the few remaining human settlements smashed up a few shipments of milk, claiming it to be "pizzled" in order to get a representative (an android that was only humanoid due to the natural efficiency of the design) to "reason"] with. Negotiations failing, the humans resort to dirtier strategies: finding out what the factory was low on, and putting a small chunk of it on the border of two factory's zones of control and watch the chaos ensue. The remainder of the story details the extent to which these factories, like their human counterparts before them, were willing to go to in order to continue producing virtually useless products. Rather unsettlingly, after the factories seemed destroyed, rockets were fired from each factory out to the stars. Humanity may have fallen, but its creations would colonize the stars in search of resources to supply a dead race.

The show puts a very different twist on this setting. A colony of incredibly advanced androids (designed to think that they are human) begin attacking and hacking the autofac's delivery drones to get its attention, open a conversation, and hopefully get it to shut down. By shooting down a drone, hacking into the old customer help desk, and telling the factory that its merchandise was "pizzled," the colony, led by Emma, the computer-savvy protagonist, capture, "reprogram" a humanoid PR robot, and make their way into the factory with the fullest intention of nuking it from the inside. The episode ends with us (and the autofac) discovering that Emma knew she was an android (she was modeled after the inventor of the autofac, after all) and had just set off a 'logic bomb' in the factory's programming, allowing her to escape and live happily ever after, pretending to be human, without the autofac.

It seems that these stories share a name and setting, but differ wildly in theme, premise, and twists. In the show, the motif was to 'unmake what we [humanity] made' in favor of a simpler life independent of the polluting, wasteful autofacs; which, while this theme was present in the first page of the short story, was quickly superseded by the violent, war-like competitions of the autofacs. The book uses this as an allegory for the inevitability of resource wars in a consumer culture, as opposed to the Ex Machina-esque message of agency put forth by the show.

Philip K Dick's Electric Dreams Episode 2: "Autofac"

Episode directed by Peter Horton

Episode written by Travis Beacham

Available on Amazon Video

</SPOILERS>

Stay tuned next week for "Human Is"!

SUNDANCE FILM REVIEW

Genre filmmaking at its finest

Two outstanding films round out Sundance's Midnight Program

★★★★★

Hereditary

Directed by Ari Aster

Screenplay written by Ari Aster

Starring Toni Collette, Gabriel Byrne, Alex Wolff, Ann Dowd, Milly Shapiro

Not Rated, in theaters June 8

By Jack Spira

Introducing *Mandy*, the latest feature from emerging cult film director Panos Cosmatos (*Beyond the Black Rainbow*), Sundance's director of programming Trevor Groth explained that the film was largely to thank for one of the best Midnight lineups the festival has ever seen. The Midnight section, according to the Sundance program, showcases films "from horror flicks and bizarre comedies to works that defy any genre," and *Mandy* is simultaneously exemplary of all three. Both a love letter and death note to genre filmmaking, Cosmatos's film employs genre tropes with a profound aesthetic respect, even as it invites us to laugh at their nonsense and strives to reach beyond them.

Nicolas Cage stars as Red Miller, a lumberjack in the Pacific Northwest who lives a quiet existence with his partner Mandy Bloom (Andrea Riseborough), a New Wave artist and fantasy aficionado. Their idyll is violently interrupted by the arrival of the Children of the New Dawn, a post-Christian religious cult led by the megalomaniacal Jeremiah Sand (Linus Roache). The rest is revenge. It's evident that Cosmatos has spent a *lot* of time with fantasy and horror, since it's all there in his film: the supernatural ocarina, the sagely weaponskeeper, the forging of a sepulchral blade, the pet tiger, the guide who gives cardinal directions, the challenger with a larger weapon. Over the course of the film, the setting itself transforms from the forested hills of Cascadia to a fantastical landscape of jutting rock and crimson skies with far too many moons. Even the unconscious subtexts of the horror genre explode into stark, ludicrous physicality. One memorable foe, a demon sporting a sword for a phallus and a penchant for hard pornography, farcically embodies the penetrative violence that abounds in slasher films.

Cosmatos is positively giddy with the possibilities and for the most part delivers in his earnestness, some flaws notwithstanding. The most apparent among these is the film's pacing, which lingers too long on certain expository scenes (namely, those marked by empty character-building dialogue) to no effect and concludes the long-awaited final showdown a touch too quickly. The result is a film unfortunately lacking in the pathos it evidently wants to convey, striving to transform the hackneyed formula of the revenge film into a tragic portrait of innocence lost, though completely misguided in its attempts to do so. And yet, failing this, Cosmatos still manages to transcend the medium in which he works.

Anything but a *Scream*-like satire, *Mandy* pokes holes in bloated genre forms and holds what substance remains in solemn reverence. The film's artistic vision and musical score (Jóhann Jóhannsson, *Sicario*) are among the greatest testaments to this, conjuring truly breathtaking experiences of the otherworldly. Cosmatos' camera alternates between hazy trance and sharp lucidity, the latter providing some of the film's greatest laughs — and, arguably, its turning point — in a stationary, wide-angle shot of Nicolas Cage at long last unleashing his anguish. (This author would be remiss not to mention Cage's casting here. Don't expect the crackling desperation that powered his heartrending performances in *Leaving Las Vegas* or *Adaptation* or the sellout insanity behind *The Wicker Man* or *Bangkok Dangerous*; Cosmatos relishes in the actor's range from unbridled madness to subtle abjection and writes him a character that swings as smoothly and rapidly between to two as needed.) Even if their reach exceeds their grasp, Cosmatos' efforts amount to so much more than a playful romp, showing us the wildly transporting possibilities of our fantastical imaginings.

Where *Mandy* is obsessed with the minutiae of genre filmmaking, *Hereditary*, the debut feature from writer-director Ari Aster, would rather abandon the label altogether as needlessly reductive. To be sure, *Hereditary* is a horror film, and a terrifying one at that, yet the psychological assault it enacts upon its audience is derived from the very real emotional terror of family traumas — indeed, these painfully personal realities comprise the entire foundation for the horror effected by the supernatural elements that emerge in the film's second half.

A prologue displaying the text of a memorial service notice opens the story shortly after the death of Ellen, the guarded and manipulative matriarch of the Graham family. Annie Graham (Toni Collette), her daughter, gives an ambivalent eulogy ("She was a very difficult woman, which maybe explains me") and later divulges to a peer therapy group the extent of her mother's damaging influence and her own resulting guilt: "I just don't want to put any more stress on my family." Unexpected plot developments come early and often, but suffice it to say that Ellen's poisonous legacy isn't laid to rest with her. Annie continually recoils from the memory of her mother, a fear intensified by seeing her relationship to her own children strained by the emotional baggage she carries. A singular fate is borne by her daughter, Charlie (a very creepy Milly Shapiro), who in her infancy was an object of Ellen's obsession.

Collette's character, the central node in this family drama, is particularly affecting. Annie is animated by a performance that gut-wrenchingly portrays the confusion, empathy, hatred, guilt, and fear that she suffers, many of which come to a head in a family dinner scene to rival that in *The Texas Chainsaw Massacre* for its horrifying realism. An artist who works in miniature dioramas, often of real or imagined scenes from her own experience, Annie is often seen recreating her environs on a smaller scale. More than just a reflexive metaphor for the art of filmmaking, the activity serves to symbolize the perfectly unintentional but no less harmful violence of perpetuating family traumas. As a way of processing her own fears and anxieties, she duplicates and transfers them onto characters of her own creation. The film's opening shot, in this manner, establishes everything to follow: the camera pans from a treehouse seen through a window to Annie's tiny rendition of the family's actual house, before closing in on one of the rooms until it fills the frame and real actors commence the action.

Aster terrorizes his viewers by gradually accumulating an existential dread at the sheer power of blood relations, a dread that suffuses the film's atmosphere and heightens even the simplest of formal scares. The occasional jump scare, the haunted house aura (American Craftsman architecture was never so insidious), the nightmare sequences: all these devices are loaded with the terrible fear that these characters suffer for the awful, immutable fact of their family ties. Moreover, the occult in the film is merely a sublimation of the dark magic we work upon each other, even and especially our loved ones, every day. *Hereditary* is a horror film that accomplishes the greatest any film has to offer: a carefully observed portrait of reality. Leaving the theater, one wonders, aghast, what personal demons inspired Aster to tell this story; upon reflection, however, the horrors he shows become all too universal.

★★★★☆

Mandy

Directed by Panos Cosmatos

Screenplay written by Panos Cosmatos and Aaron Stewart-Ahn

Starring Nicolas Cage, Andrea Riseborough, Linus Roache

Not Rated, coming soon

MUSICAL REVIEW

MTG's sleepover extravaganza

It was red and yellow and green and brown and scarlet and black and ochre and...

VICTOR M REYES ESPINOZA—THE TECH

David Favela surrounded by the cast in the IAP production of MIT MTG's "Joseph and the Amazing Technicolor Dreamcoat."

By Erica Weng

STAFF WRITER

Human camels, cowboy hats, cheesy French accents, Elvis, fluffy pillows, spinning colors and whirling lights, and a familiar Bible bedtime story come together in MTG's latest production: *Joseph and the Amazing Technicolor Dreamcoat*.

The well-loved musical composed by well-loved Andrew Lloyd Webber takes a sleepy spin in MTG's version, with PJs and blankets and bedtime stories aplenty. The audience was invited to watch from fluffy pillows on the floor as the stone-tabletesque Bible story transformed before their eyes into a whirlwind of dreams and color and Candyland — complete with fake Western accents effusively waxing about "another angel in heaven"; a hairy-chested Pharaoh casually grooving as Elvis (Alejandro Vientós G); and milk and cookies — yes, milk and cookies, for YOU, the audience!

I especially appreciated Simeon's (Edward Nguyen '19) exquisite French inflection and his angsty efflux of Frenchy lyrics, as his brothers wallowed around drunk on juice boxes, moaning things like "beret" and other French-sounding exclamations. "Aww"-inducing was the trio of sister-narrators, who framed the story of Joseph with their bedtime frolicking: the patient oldest sister's (Dheekshita Kumar '20) sing-songing in a quite lovely voice to the restless youngest sister (Grace Kuffner '20), and the "middlest sister" (Elisa Boles '18) who at first will have nothing to do with her petulant younger sister's antics, but later softens and joins the other two in indulging in Joseph's story. Potiphar's provocative partner, puckered up in feathered boa and poppin' pink heels, dazzled the crowd (but not Joseph) with her feminine charms. The orchestra, which occasionally overwhelmed the singing voices with booming brass and string (not the orchestra's fault — I blame poor wiring and micing), pampered the audience at intermission with a rendering of Taylor Swift's *I Knew You Were Trouble*, goat-style.

Lighting, done by Jakob Weisblat '18 and Irena Martinez '18, captured my attention throughout the show. When the voices were too muffled to hear, I instead focused on glamorous colors splattered around the stage: a golden glow framing Joseph and his Pharoah-endowed glory; a weeping blue bathing youngest brother Benjamin in a desolate aura as he wails upon his knees after being framed; bars of light cast upon Joseph in his cold prison cell, evoking a despair the ratchet "prison walls" lining the floor around him fails to create.

The production showed on Feb. 2–4, and will show again this weekend, Feb. 9–11 at 8 p.m., in La Sala de Puerto Rico in the Student Center. At only 1.5 hours, it's a really short musical — take a brief escape from your impending semester workload into the absurdity of this historical tale blessed by the imagination of MIT's MTG of many colors! "It was red and yellow and green and brown and scarlet and black and ochre and peach and ruby and olive and violet and fawn and lilac and gold and chocolate and mauve and cream and crimson and silver and rose and azure and lemon and russet and grey and purple and white and pink and orange and blue!"

Joseph and the Amazing Technicolor Dreamcoat

Directed by Kirsten Olson '14

Performed by the MIT Musical Theater Guild

Music by Andrew Lloyd Webber, lyrics by Tim Rice

La Sala de Puerto Rico, Student Center

Feb. 2–4, 9–11, 2018

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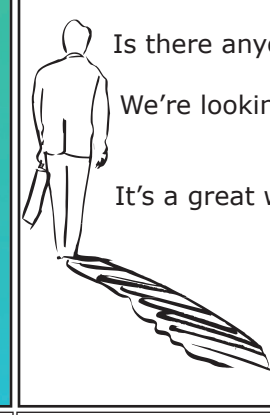

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Solution to Talk a Lot

from page 11

	H	E	R	D		S	T	A	R		T	A	P	S
C	E	D	A	R		C	O	C	A		O	K	R	A
A	R	E	N	A		E	A	R	N		T	R	O	D
L	O	N	G	W	I	N	D	E	D		H	O	W	L
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A	P	R	O	N	S		J	A	M	U	P			
B	E	E	F		O	P	E	C		L	O	B	E	S
C	R	A	F	T		E	A	T		L	I	E	T	O
S	P	R	E	E		O	N	I	T		N	E	A	R
		W	A	R	N	S		R	A	T	T	L	E	
S	H	O	W	M	E			A	I	M				
T	A	C	O		B	I	G	M	O	U	T	H	E	D
P	I	E	R		A	R	E	A		S	A	U	T	E
A	T	A	D		T	A	N	S		E	X	E	C	S
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Solution to Super

from page 9

2	9	5	4	3	1	7	6	8
4	3	6	7	8	2	5	9	1
7	8	1	5	6	9	4	2	3
9	1	4	6	7	8	2	3	5
3	5	7	2	9	4	1	8	6
8	6	2	3	1	5	9	7	4
5	7	8	9	4	6	3	1	2
1	2	3	8	5	7	6	4	9
6	4	9	1	2	3	8	5	7

Solution to Bowl

from page 9

1	3	5	2	4	6
4	6	2	5	1	3
2	4	6	3	5	1
5	1	3	6	2	4
6	2	4	1	3	5
3	5	1	4	6	2

Solution to Philly

from page 11

3	5	9	8	2	1	6	7	4
4	1	8	7	6	5	9	2	3
6	2	7	3	9	4	8	5	1
8	4	6	1	7	2	5	3	9
7	3	5	4	8	9	1	6	2
1	9	2	6	5	3	4	8	7
5	7	4	2	1	8	3	9	6
9	6	1	5	3	7	2	4	8
2	8	3	9	4	6	7	1	5

Solution to Special

from page 11

3	4	2	5	6	1
4	5	3	6	1	2
2	3	1	4	5	6
1	2	6	3	4	5
6	1	5	2	3	4
5	6	4	1	2	3

Solution to Quirky

from page 9

M	A	R	C	O		S	P	A		A	O	R	T	A
A	R	O	A	R		T	A	R		S	K	I	R	T
Y	O	U	N	G	T	U	R	K		H	I	M	O	M
A	N	T	I		A	P	T		N	O	N	E	T	S
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		R	E	F	E	R	E	N	C	E	W	O	R	K
	M	I	S	S			R	U	E		A	Z	U	L
B	A	D		O	D	E		T	R	E		A	B	M
E	R	G	O		A	L	A			V	C	R	S	
E	X	E	C	U	T	I	V	E	P	E	R	K		
			A	P	E			A	N	E	R	A		
S	A	C	R	E	D			T	A	T		C	A	G	E
A	L	L	I	N		J	A	M	E	S	K	I	R	K
S	P	E	N	D		O	R	E		O	L	L	I	E
S	O	F	A	S		E	S	L		N	E	S	T	S

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